#### **DECLARATION AND POWERS OF ATTORNEY**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

	DIFFERENTIA	•		
the specification of which was filed on	October 16 ,2004	as Application Serial No.	PCT/EP 2004/011686	
and was amended on			nd serial number, is attached hereto	
I have reviewed and understand the	contents of the above ider	ntified specification, including	the claims, as amended by any	
amendment referred to above.	_			
I acknowledge the duty to disclose in	formation which is materia	al to the examination of this a	application in accordance with 37	
CED 1 56				

I hereby claim foreign priority benefits under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate by me or my representatives or assigns for this invention having a filing date before that of the application on which priority is claimed.

Application No. 03024813.2 in EP on October 30, 2003 priority claimed [x] Yes [] No on November 13, 2003 priority claimed [x] Yes [] No Application No. 03025972.5 in EP Application No. \_\_\_\_\_ in \_\_\_\_ on \_\_\_\_ priority claimed [] Yes [] No hereby claim the benefit under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose material information as defined in 37 CFR 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application

Filed [] patented [] pending [] abandoned Serial No. Filed [] patented [] pending [] abandoned Serial No.\_

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

hereby appoint, individually and collectively, the following as my/our attorney or agent with full power of substitution and revocation, to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith:

Joseph S. Tripoli	Registration No. 26,040	and
Joseph J. Laks	Registration No. 27,914	and
Harvey D. Fried	Registration No. 28,298	and
Ronald H. Kurdyla	Registration No. 26,932	and
Robert D. Shedd	Registration No. 36,269	and
Vincent E. Duffy	Registration No. 39,964	and
Robert B. Levy	Registration No. 28,234	

PLEASE ADDRESS ALL COMMUNICATIONS TO:

**JOSEPH S. TRIPOLI** PATENT OPERATIONS THOMSON LICENSING INC.

P. O. BOX 5312
PRINCETON NEW JERSEY 08543-5312

	PRINCETON, NEW 3	
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}	(Type or Print)	(Signature in Full. No initials.)
Citizenship		Date 23 5am 2006
Post Office Address	Bodmerstraße 5	
Residence 85	622 Feldkirchen, Germany	
Sole or Joint Inventor (2)	Marten Kabutz	
, ,	(Type or Print)	(Signature in Full. No initials.)
Citizenship ZA		Date
Post Office Address	Pforzheimer Str. 15/2	
Residence 78	048 Villingen-Schwenningen, Germany	
Sole or Joint Inventor (3)	Heinrich Schemmann	
	(Type or Print)	(Signature in Full. No initials.)
DE		
Citizenship		Date
Post Office Address	Danziger Str. 17	
Residence	048 Villingen-Schwenningen, Germany	

Patent Operations Thomson Licensing Inc. P.O. Box 5312 Princeton, NJ 08543-5312

Docket No.: PD030113

### **DECLARATION AND POWERS OF ATTORNEY**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.  I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled
DIFFERENTIAL PHASE DETECTOR
the specification of which was filed on October 16,2004 as Application Serial No. PCT/EP 2004/011686
or, if not identified here by filing date and serial number, is attached hereto.
I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any
amendment referred to above.
I acknowledge the duty to disclose information which is material to the examination of this application in accordance with 37
CFR 1.56.
I hereby claim foreign priority benefits under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed
below and have also identified below any foreign application for patent or inventor's certificate by me or my representatives or
assigns for this invention having a filing date before that of the application on which priority is claimed.
Application No. 03024813.2 in EP on October 30, 2003 priority claimed [x] Yes [] No
Application No. 03025972.5 in EP on November 13, 2003 priority claimed [x] Yes [] No
Application No. in on priority claimed [1 Yes [1 No.
hereby claim the benefit under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter
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paragraph of 35 USC 112, I acknowledge the duty to disclose inaterial information as defined in 77 21 1.50 which essentially paragraph of 35 USC 112, I acknowledge the duty of the angle of the projection
between the filing date of the prior application and the national or PCT international filing date of this application
Serial No Filed [] patented [] pending [] abandoned
Serial No. Filed [] patented [] pending [] abandoned
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information
and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements
and the like so made are punishable, by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements
may jeopardize the validity of the application or any patent issued thereon.
I bereby appoint, individually and collectively, the following as my/our attorney or agent with full power of substitution and
revocation, to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected therewith:
revocation, to prosecute this application and to transact an Edominose in the Cropy attended to the Control of
Joseph S. Tripoli Registration No. 26,040 and
Harvey D. Fried Registration No. 28,298 and
Ronald H. Kurdyla Registration No. 26,932 and
Robert D. Shedd Registration No. 36,269 and
Vincent E. Duffy Registration No. 39,964 and
Robert B. Levy Registration No. 28,234
nobelt B. Levy Negistration No. 26,264
PLEASE ADDRESS ALL
COMMUNICATIONS TO: JOSEPH S. TRIPOLI
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THOMSON LICENSING INC.
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Sole or Joint Pierluigi Lo Muzio
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Citizenship Date
Post Office Address Bodmerstraße 5
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nesidence
Sole or Joint Marten Kabutz
Inventor (2)
(Type or Print) (Signature in Full. No initials.)
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Residence 78048 Villingen-Schwenningen, Germany
Sole or Joint Heinrich Schemmann
Inventor (3)
Inventor.(3)  (Type or Print)  (Signature in Full. No initials.)
Inventor (3)  (Type or Print)  (Signature in Full. No initials.)  DE
Inventor (3)  (Type or Print)  (Signature in Full. No initials.)  DE  Citizenship
Inventor (3)  (Type or Print)  (Signature in Full. No initials.)  DE
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Patent Operations Thomson Licensing Inc. P.O. Box 5312 Princeton, NJ 08543-5312

Docket No.: PD030113

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I believe I am the original, first and so	e inventor (if only one name is	listed below) or an o	riginal, first and joint inventor (if	
plural names are listed below) of the subje			sought on the invention entitled	
	DIFFERENTIAL PH		•	
the specification of which was filed on	October 16 ,2004 as	Application Serial No	PCT/EP 2004/011686	
•	, or, if not identifie	ed here by filing date	and serial number, is attached he	ereto.
and was amended on				
I have reviewed and understand the c	ontents of the above identified	specification, includi	ng the claims, as amended by ar	лy
amendment referred to above.				~~
I acknowledge the duty to disclose infe	ormation which is material to the	he examination of this	application in accordance with t	37
CFR 1.56.				
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below and have also identified below any f	preign application for patent o	r inventors certificate	by me or my representatives or	
assigns for this invention having a filing da		n on which priority is	claimed.	
Application No. 03024813.2 in				
Application No. 03025972.5 in	EP on November 13, 200			
Application No in	on prior	ity claimed [ ] Yes [ ] I	No	
hereby claim the benefit under 35 US	C 120 of any United States ap	plication(s) listed bel	ow and, insofar as the subject m	atter
of each of the claims of this application is	ot disclosed in the prior Unite	d States application i	n the manner provided by the firs	st <sub>.</sub>
paragraph of 35 USC 112, I acknowledge	he duty to disclose material in	itormation as defined	in 37 CFR 1.56(a) which occurre	∌a
between the filing date of the prior applicat	ion and the national or PCT in	ternational filing date	or this application	
	[] patented [] pendin	g [ ] abandoned		
Serial No Filed I hereby declare that all statements m	[] patented [] pendin	g [ ] abandoned	all atatamanta mada an informati	ion
and belief are believed to be true; and furt	ace that these statements were	mode with the know	di statements made on informati	1011
and the like so made are punishable by fit	ne or imprisonment or both u	nder 18 HSC 1001 ar	nd that such willful false statemen	nte
may jeopardize the validity of the application	on or any natent issued therec	naer 10 000 1001 ar	triat such willian raise statemen	1100
I hereby appoint, individually and colle	ctively the following as my/or	ır attornev or agent w	ith full power of substitution and	
revocation, to prosecute this application ar	d to transact all business in the	ne U.S. Patent and Tr	ademark Office connected there	with:
totoodilott, to proceed that approximate				
Joseph S. Trip			and	
Joseph J. Lak			and	
Harvey D. Frie			and	,
Ronald H. Kur	dyla Registration	No. 26,932	and	
Robert D. She	dd Registration	No. 36,269	and	
Vincent E. Dut	fy Registration	No. 39,964	and	
Robert B. Levy	Registration	No. 28,234		
		**		
PLEASE ADDRESS ALL				
COMMUNICATIONS TO		•		
	PATENT OPERATIONS			
	THOMSON LICENSING INC. P. O. BOX 5312			
•	PRINCETON, NEW JERSEY	08543-5312		
Sole or Joint Pierluigi Lo Muzio				
I Inventor (1)				
(Type or Print)		(Signature in Full. No initia	·S.)	
Citizenship	Da	te		
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Residence 85622 Feldkirchen, Germ	any			
Solo or loint Admidian Maharita				

Sole or Joint Inventor (1)	Pierluigi Lo Muzio	
•	(Type or Print)	(Signature in Full. No initials.)
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Sole or Joint Inventor (3)	Heinrich Schemmann	Veride Sallon
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## **POWER OF ATTORNEY CORRESPONDENCE ADDRESS** INDICATION FORM

Application Number				
Filing Date				
First Named Inventor	Pierluigi L	o Muzio	etal	
Title	Differentia	l Phase	Dete	cto
Art Unit				
Examiner Name				
Attorney Docket Number	PD030113		)	

	Attorney	DOORCE	Number   Pi	30301	
I hereby appoint:	Customer Num	ber 24	498		
☑ Practitioners at Customer Num OR	ber				
Practitioner(s) named below:					
	Name		Registration	Number	
	· <u> </u>				
				·	
as my/our attorney(s) or agent(s) to Trademark Office connected there	o prosecute the application with.	identified	d above, and to tra	ansact all	business in the Patent and
Please recognize or change the	correspondence address fo	r the abo	ve-identified appli	cation to:	:
The above-mentioned Custon	mer Number:.				
OR The address associated with OR	Customer Number:				
☐ Firm or Joseph J. Laks, Vice President					
Address THOMSO	N LICENSING INC.				
Address P. O. BOX	( 5312				
City PRINCET	ON	State	NJ	ZIP	08543-5312
Country USA					
Telephone 609	÷734−6828	Fax	609-734-6888		
I am the:					
Applicant/Inventor.		. 74			·
Assignee of record of the en Certificate under 37 CFR 3.7			).		
Certificate under Gr. Gr. 14 G.7	SIGNATURE of Applic			rd	
Name ROBERT D			6,269		
ROBBIT B.	TORAL	<u> </u>	- /		
			Telephone	609-	734-6828
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.					
Submit multiple forms if more that	n one signature is require submitted.	ed, see b	elow*.	<del> </del>	

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

# POWER OF ATTORNEY THOMSON LICENSING

We,

THOMSON LICENSING 46, Quai A. Le Gallo

F-92100 Boulogne-Billancourt

France

do hereby grant

Joseph J. Laks Vice President

Thomson Licensing Inc. Two Independence Way

Princeton, New Jersey 08540

a revocable, non-exclusive and delegable power of attorney to act for us (including the signing of requisite documents) in proceedings concerning patents and applications for patents, including international and other multi-country patents and applications for patents, in our name in the Patent Offices in all countries worldwide from July 1, 2005

DATED this \_\_\_\_14th\_\_\_day of \_\_February\_, in the year 2006.

Signature:

Typed Name As Signed:

Title:

Béatrix de Russé

Authorized Representative,

Vice-President Intellectual Property & Licensing

THOMSON LICENSING

#### POWER OF ATTORNEY THOMSON LICENSING

THOMSON LICENSING 46, Quai A. Le Gallo F-92100 Boulogne-Billancourt France

does hereby grant

Harvey D. Fried - Sr. Patent Counsel/Manager Ronald H. Kurdyla - Sr. Patent Counsel/Manager Robert D. Shedd - Sr. Patent Counsel/Manager Robert B. Levy - Sr. Patent Counsel/Manager Frank Y. Liao - Sr. Patent Counsel/Manager Reitseng Lin - Sr. Patent Counsel Christine Johnson - Sr. Patent Counsel Guy H. Eriksen - Sr. Patent Counsel Catherine A. Ferguson - Sr. Patent Counsel Joseph J. Kolodka - Sr. Patent Counsel Kuniyuki Akiyama - Sr. Patent Counsel Paul P. Kiel - Sr. Patent Counsel Jeffrey M. Navon - Sr. Patent Counsel Joel M. Fogelson - Sr. Patent Counsel Joseph J. Opalach - Sr. Patent Counsel Sammy S. Henig - Sr. Patent Counsel Patricia A. Verlangieri - Sr. Patent Counsel Brian J. Dorini, Sr. Patent Counsel Jorge Tony Villabon - Patent Counsel Vincent E. Duffy - Patent Counsel Richard LaPeruta - Patent Counsel Francis A. Davenport - Sr. Patent Agent William A. Lagoni - Patent Agent Brian J. Cromarty - Patent Agent Ronald Kolczynski - Member Patent Staff Michael A. Pugel - Patent Agent Thomson Licensing Inc. Two Independence Way Princeton, New Jersey 08540

a revocable, non-exclusive and delegable power of attorney to act for us (including the signing of requisite documents) in proceedings concerning patents and applications for patents, including international and other multi-country patents and applications for patents, in our name in the Patent Offices in all countries worldwide from July 1, 2005.

> day of Jediuary, 2006. DATED this

SIGNED

Vice President

Thomson Licensing Inc. and

Attorney In Fact for

THOMSON LICENSING

Davida tornarotto

WITNESS